**FACTORY PATTERN CODE**

package FactoryPattern;

public interface Document {

void open();

}

public abstract class DocumentFactory {

public abstract Document createDocument();

}

public class ExcelDocument implements Document {

public void open() {

System.out.println("Opening Excel document");

}

}

public class ExcelDocumentFactory extends DocumentFactory {

public Document createDocument(){

return new ExcelDocument();

}

}

public class PdfDocument implements Document {

public void open() {

System.out.println("Opening PDF document");

}

}

public class PdfDocumentFactory extends DocumentFactory {

public Document createDocument(){

return new PdfDocument();

}

}

public class WordDocument implements Document {

public void open() {

System.out.println("Opening Word document");

}

}

public class WordDocumentFactory extends DocumentFactory {

public Document createDocument(){

return new WordDocument();

}

}

public class DocumentTest\_1 {

public DocumentTest\_1() {

}

public static void main(String[] var0) {

WordDocumentFactory var1 = new WordDocumentFactory();

Document var2 = var1.createDocument();

var2.open();

PdfDocumentFactory var3 = new PdfDocumentFactory();

Document var4 = var3.createDocument();

var4.open();

ExcelDocumentFactory var5 = new ExcelDocumentFactory();

Document var6 = var5.createDocument();

var6.open();

}

}

**OUTPUT**

